

Title (en)

GATE DRIVE CIRCUIT AND POWER CONVERTER

Title (de)

GATE-TREIBERSCHALTUNG UND LEISTUNGSWANDLER

Title (fr)

CIRCUIT DE COMMANDE DE GRILLE ET CONVERTISSEUR DE PUISSANCE

Publication

EP 4117182 A2 20230111 (EN)

Application

EP 22183327 A 20220706

Priority

JP 2021113061 A 20210707

Abstract (en)

A gate drive circuit according to an embodiment includes: a voltage detector that detects a voltage between a first terminal and a second terminal of a switching device; a delay circuit that outputs, with a delay for a predetermined time, a detected value of the voltage obtained from the voltage detector; and a first off-mode drive circuit and a second off-mode drive circuit that apply a control signal to a control terminal of the switching device for turning off the switching device, wherein the first off-mode drive circuit turns off the switching device faster than the second off-mode drive circuit, and stops its operation to turn off the switching device when the delayed voltage value output from the delay circuit exceeds a predetermined threshold value.

IPC 8 full level

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CPC (source: CN EP US)

H02H 7/1203 (2013.01 - CN); **H02M 1/0029** (2021.05 - EP); **H02M 1/0054** (2021.05 - CN EP); **H02M 1/08** (2013.01 - CN EP US); **H02M 1/32** (2013.01 - US); **H03K 17/04123** (2013.01 - US); **H03K 17/04206** (2013.01 - US); **H03K 17/0822** (2013.01 - EP); **H03K 17/145** (2013.01 - EP); **H03K 17/165** (2013.01 - EP); **H03K 17/284** (2013.01 - EP); **H02M 1/32** (2013.01 - EP); **H02M 1/327** (2021.05 - EP); **H02M 7/5387** (2013.01 - EP); **H03K 2217/0027** (2013.01 - EP); **H03K 2217/0081** (2013.01 - US); **Y02B 70/10** (2013.01 - EP)

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BA ME

Designated validation state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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